UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Software Engineer (Data Visualisation)

Consumer Data Research Centre | Leeds Institute for Data Analytics

Salary: Grade 7 (£37,099 - £44,263 p.a. depending on experience)

Reporting to: Oliver Mansell, Centre Manager, CDRC

Reference: ENVGE1239

Fixed term to February 2026 due to external funding.

Location: University of Leeds (with scope for hybrid working).

We are open to discussing flexible working arrangements.

Overview of the Role

We are seeking a talented, driven and ambitious Research Software Engineer (Data Visualisation). We are looking for someone who is data-literate and creative. The role will entail building and maintaining interactive web-based data visualisations and other web applications. You should have a good understanding of project delivery, from inception through to dissemination, have experience in dealing with a range of internal and external stakeholders, and be comfortable providing technical advice, including to non-experts. You will also have the capability, invention and initiative to work alongside our established team of data scientists and internationally recognised academics, thereby contributing to driving their activity to more ambitious levels.

As a Research Software Engineer (Data Visualisation) you will provide a range of technical software development-, data visualisation- and cloud-computing-related activities that enhance research outcomes, improve impact and accelerate productivity. You will work with researchers from both across and beyond the University, and with a wide variety of partners drawn from both the private- and public sector.

The postholder's time will be split between two broad projects: continuing the design and production of visualisations that highlight the data assets and research insights of the Consumer Data Research Centre (CDRC) at Leeds, and – particularly from March 2025 – contributing to the build of an interactive dashboard designed to enhance targeted interventions into infectious diseases. Both projects will require web-based data visualisations and the use of relevant skills.

The CDRC is hosted by the Leeds Institute for Data Analytics (LIDA), a cross-faculty grouping playing a central role in the University of Leeds 2020-2030 strategy, and aligning with national priorities such as the development of data science and artificial intelligence (as one of the challenges outlined in the UK's Industrial Strategy).

The CDRC has recently made a significant investment in its data infrastructure and analytical/software engineer staff, and has launched a number of data tools and products. Having moved to a cloud-based research platform, we want to further develop and embed new and improved ways of working, continue to build our expertise in using innovative techniques, and support our researchers in realising the exciting opportunities our enhanced infrastructure can bring.

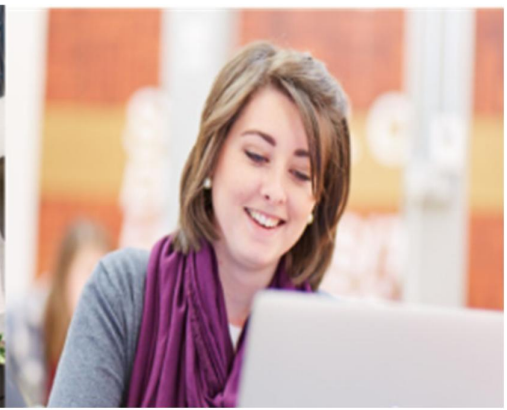


Main duties and responsibilities

- Working with and providing expert advice, guidance and training to members of the research community on areas relating to data visualisation. For example:
  - Development of both static and dynamic data visualisations;
  - Development and maintenance of interactive web applications that visualise relevant datasets and provide targeted insights;
  - The use of web development libraries such as Shiny, Dash, D3js or similar;
  - Software development practices such as testing and quality assurance;
  - Cloud platforms for deploying and hosting bespoke data visualisations and dashboards;
- Contributing to the building and development of new/derived data products, in-line with agreed research priorities. This is likely to include developing, engineering, refactoring and/or improving code for a series of defined open web apps;
- Acting as a first point of contact on the launch of new data products, fielding requests for technical support from end-users including key partners, and troubleshooting / providing technical advice & solutions;
- Maintaining and developing your knowledge of subject area fundamentals and ensuring you are up to date with new advances in data visualisation and associated technology;
- Proactively sharing examples of innovative research and team working best practice with other members of the team and the wider research community;
- Planning and allocating your own time, with the support of the Lead Research Data Scientist, to ensure efficient deployment of resources, planning and prioritising work in line with defined aims, objectives and priorities;
- Using your knowledge and experience to contribute to the Centre's strategic long-term plans where these relate to research data science and research software engineering;
- Building and maintaining relationships with other Research Software Engineers across the University and the wider academic community, relevant professional societies, research funding bodies and project partners.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.





Qualifications and skills

Essential

- Expertise in data visualisation, gained through substantial experience of working in an academic, public or private sector environment;
- An interest in and understanding of data relating to consumer behaviour that is generated by day-to-day digital footprints, and of the research questions and challenges associated with such data;
- Effective communication and interpersonal skills, working and engaging with a diverse range of collaborators , partners and stakeholders, including the ability to explain technical problems to non-specialists;
- Experience with at least one programming language used in Data Visualisation (such as R, Python, JavaScript);
- An awareness of and interest in the use of tools and services in public cloud computing to develop software tools for research;
- The ability to rapidly learn and assimilate new skills and knowledge and turn them into practical tools and techniques;
- An understanding of the importance of Research Software Engineering good practice in developing reliable and reproducible software tools (such as version control, testing, package management, literate programming tools such as Jupyter Notebooks and Rmarkdown/ R Notebooks);
- Strong initiative, with excellent organisational, planning and self-management skills, including the ability to work accurately, carefully and quickly, to manage and complete projects to agreed deadlines, and to deliver high-quality work.

Desirable

- Experience of working in a quality-controlled environment working with highly confidential and/or sensitive data (e.g. ISO27001, Department of Health Data Security and Protection Toolkit);
- Experience of development operations and/or Microsoft Azure management;
- Familiarity with at least one web development library for interactive data visualisation (such as Shiny, Dash or D3js);
- Familiarity with at least one data visualisation and analytics platform (such as Tableau or Power BI).



Additional information

Find out more about the CDRC, and its host organisation at the University of Leeds, the Leeds Institute for Data Analytics (LIDA)

Working at Leeds
We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our Working at Leeds information page.

Our University
At the University of Leeds, we are committed to providing a culture of inclusion, respect and equity of opportunity that attracts, supports, and retains the best students and staff from all backgrounds. Whatever role we recruit for we are always striving to increase the diversity of our community, which each individual helps enrich and cultivate. We particularly encourage applications from, but not limited to Black, Asian, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

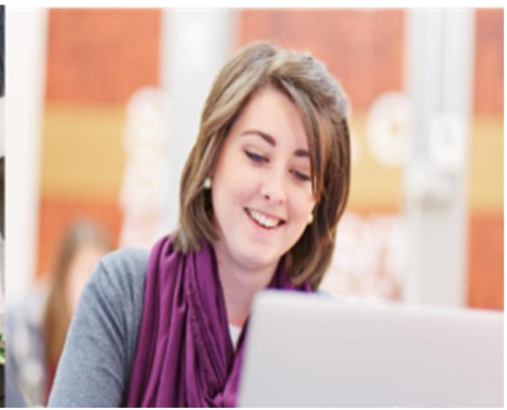
Information for disabled candidates
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at hr@leeds.ac.uk

Criminal Record Information

Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information page.





Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information please visit: www.gov.uk/skilled-worker-visa.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: https://www.gov.uk/global-talent.